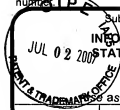


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Application Number	10/577,179
Filing Date	11/1/2004
First Named Inventor	Virgil L. Woods
Art Unit	1631
Examiner Name	Unknown
Attorney Docket Number	SDUC1160-1 (041673-3603)

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A1	4,762,785	08-09-1988	Comai	
	A2	5,451,513	09-19-1995	Maliga et al.	
	A3	5,545,817	08-13-1996	McBride et al.	
	A4	5,658,739	08-19-1997	Woods, Jr.	
	A5	6,291,189	09-18-2001	Woods, Jr.	
	A6	6,331,400	12-18-2001	Woods, Jr.	
	A7	6,599,707	07-29-2003	Woods, Jr.	

UNPUBLISHED U.S. PATENT APPLICATION DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Application Document	Filing Date of Cited Document MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS

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	A8	Altmann et al., "Pathways and Intermediates in Forced Unfolding of Spectrin Repeats", Structure (Camb), 10:1085-1096, 2002	
	A9	Bai et al., "Thermodynamic Parameters from Hydrogen Exchange Measurements", Methods Enzymol., 259:344, 1995	

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Examiner Signature	/Eric Dejong/	Date Considered	01/02/2011
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Sheet	2	of	16
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	A10	Bai et al., "Primary Structure Effects on Peptide Group Hydrogen Exchange", Proteins: Structure, Function, and Genetics 17:75-86, 1993	
	A11	Baldwin, "Temperature Dependence of the Hydrophobic Interaction in Protein Folding", Proc Natl Acad Sci USA, 83:8069-72, 1986	
	A12	Beasty et al., "Characterization of an Early Intermediate in the Folding of the σ Subunit of Tryptophan Synthase by Hydrogen Exchange Measurement", Biochemistry, 24:3547-3553, 1985	
	A13	Beaton, A. and Tukey, J.W., "The Fitting of Power Series, Meaning Polynomials, Illustrated on Band-Spectroscopic Data", Technometrics, 16: 147-192, 1975	
	A14	Benjamin et al., "Long-Range Changes in a Protein Antigen Due to Antigen-Antibody Interaction", Biochemistry, 31:9539-0545, 1992	
	A15	Breddam, "Serine Carboxypeptidases. A Review", Carlsberg Res. Commun., 51:83-128, 1986	
	A16	Burz et al., "Mapping Structural Perturbations in Escherichia Coli Aspartate Transcarbamylase by Medium Resolution Hydrogen Exchange", Biophys. J., 49:70-72, 1986	
	A17	Chen et al., "Probing the ligand binding domain of the GluR2 receptor by proteolysis and deletion mutagenesis defines domain boundaries and yields a crystallizable construct", Protein Science, 7:2623-2630, 1998	
	A18	Chung et al., "Hydrogen exchange properties of proteins in native and denatured states monitored by mass spectrometry and NMR", Protein Sci., 6:1316-24, 1997	
	A19	Cohen et al., "Probing the solution structure of the DNA-binding protein Max by a combination of proteolysis and mass spectrometry", Protein Science, 4:1088-1099, 1995	

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	A20	Connelly et al., "Isotope Effects in Peptide Group Hydrogen Exchange", <i>Proteins: Struct. Funct. Genet.</i> , 17:87-92 publication date not provided	
	A21	D'Aquino et al., "The Magnitude of the Backbone Conformational Entropy Change in Protein Folding", <i>Proteins</i> , 25:143-56, 1996	
	A22	Deng and Smith, "Identification of Unfolding Domains in Large Proteins by Their Unfolding Rates", <i>Biochemistry</i> , 37:6256-6262, 1998	
	A23	Dharmasiri and Smith, "Mass Spectrometric Determination of Isotopic Exchange Rates of Amide Hydrogens Located on the Surfaces of Proteins", <i>Anal. Chem.</i> , 68:2340-2344, 1996	
	A24	Dunker et al., "Protein Disorder and the Evolution of Molecular Recognition: Theory, Predictions and Observations", <i>Pac. Symp. Biocomput.</i> , 3:473-484, 1998	
	A25	Engen et al., "Investigating Protein Structure and Dynamics by Hydrogen Exchange MS", <i>Analytical Chemistry</i> , 73:256A-265A, 2001	
	A26	Englander et al., "Protein hydrogen exchange studied by the fragment separation method", <i>Anal. Biochem.</i> , 147:234-244, 1985	

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	A27	Englander et al., "Hydrogen-Tritium Exchange Survey of Allosteric Effects in Hemoglobin", Biochem., 26:1846-1850, 1987	
	A28	Englander et al., "Individual Breathing Reactions Measured in Hemoglobin by Hydrogen Exchange Methods", Biophys. J., 10:577, 1979	
	A29	Englander et al., "Hydrogen-Tritium Exchange of the Random Chain Polypeptide", Biopolymers, 7:379-393, 1969	
	A30	Englander et al., "Hydrogen Exchange Studies of Respiratory Proteins", J. Biol Chem., 248:4852-4861, 1973	
	A31	Englander et al., "Structure and Energy Change in Hemoglobin by Hydrogen Exchange Labeling", Methods Enzymol., 232:26-42, 1994	
	A32	Englander et al., "Hydrogen-Tritium Exchange", Methods Enzymol., 26:406-413, 1972	
	A33	Englander et al., "Hydrogen-Tritium Exchange", Methods Enzymol., 49:24-39, 1978	

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			Art Unit	1631	
			Examiner Name	Unknown	
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	A34	Englander et al., "Protein structure change studied by hydrogen-deuterium exchange, functional labeling, and mass spectrometry", Proc. Natl. Acad. Sci., USA 100:7057-7062, 2003	
	A35	Englander et al., "Hydrogen exchange: The modern legacy of Linderstrom-Lang", Protein Science, 6:1101-9, 1997	
	A36	Fusek et al., "Enzymic Properties of Thermopsis", J. Biol. Chem., 265:1496-1501, 1990	
	A37	Garner et al., "Predicting Disordered Regions from Amino Acid Sequence: Common Themes Despite Differing Structural Characterization", Genome Inform., 9:201-214, 1998	
	A38	Gomez et al., "The Heat Capacity of Proteins", Proteins, 22:404-12, 1995	
	A39	Grum et al., "Structures of Two Repeats of Spectrin Suggest Models of Flexibility", Cell, 98:523-535, 1999	
	A40	Habermann et al., "Energetics of hydrogen bonding in proteins: A model compound study", Protein Sci., 5:1229-39, 1996	

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	A41	Hamuro and Woods, "High Resolution, High-Throughput Amide Deuterium Exchange-Mass Spectrometry (DXMS) Determination of Protein Binding Site Structure and Dynamics: Utility in Pharmaceutical Design", J. Cell. Biochem., 37:89-98, 2001	
	A42	Hamuro et al., "Domain Organization of D-AKAP2 Revealed by Enhanced Deuterium Exchange-Mass Spectrometry (DXMS)", J. Mol. Biol., 321:703-714, 2002	
	A43	Hamuro et al., "Phosphorylation Driven Motions in the COOH-terminal Src Kinase, Csk, Revealed Through Enhanced Hydrogen-Deuterium Exchange and Mass Spectrometry (DXMS)", J. Mol. Biol., 323:871-881, 2002	
	A44	Hamuro et al., "Dynamics of cAPK Type II β Activation Revealed by Enhanced Amide H ² /H Exchange Mass Spectrometry (DXMS)", J. Mol. Biol., 327:1065-1076, 2003	
	A45	Hilser et al., "Structure-based statistical thermodynamic analysis of T4 lysozyme mutants: structural mapping of cooperative interactions", Biophys. Chem., 64:69-79, 1997	
	A46	Hilser et al., "The structural distribution of cooperative interactions in proteins: Analysis of the native state ensemble", Proc Natl Acad Sci USA, 95:9903-8, 1998	
	A47	Hilser et al., "The Enthalpy Change in Protein Folding and Binding: Refinement of Parameters for Structure-Based Calculations", Proteins, 26:123-33, 1996	

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	A48	Hilser et al., "Predicting the Equilibrium Protein Folding Pathway: Structure-Based Analysis of Staphylococcal Nuclease", <i>Proteins</i> , 27:171-83, 1997	
	A49	Hilser, et al., "Structure-based Calculation of the Equilibrium Folding Pathway of Proteins. Correlation with Hydrogen Exchange Protection Factors", <i>J. Mol. Biol.</i> , 262:756-72, 1996	
	A50	Hilser, V.J., "Protein Structure, Stability, and Folding", <i>Methods Mol Biol</i> , 168:93-116, 2001	
	A51	Hoofnagle et al., "Changes in protein conformational mobility upon activation of extracellular regulated protein kinase-2 as detected by hydrogen exchange", <i>Proceedings, National Academy of Sciences</i> , 98:956-961, 2001	
	A52	Katta et al., "Hydrogen/Deutrium Exchange Electrospray Ionization Mass Spectrometry: A Method for Probing Protein Conformational Changes in Solution", <i>J. Am. Chem. Soc.</i> , 115:6317-6321, 1993	
	A53	Kim et al., "Influence of Charge on the Rate of Amide Proton Exchange", <i>Biochemistry</i> , 21:1, 1982	
	A54	Kim et al., "Protein Internal Flexibility and Global Stability: Effect of Urea on Hydrogen Exchange Rates of Bovine Pancreatic Trypsin Inhibitor", <i>Biochemistry</i> , 32:9609-9613, 1993	

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	A55	Kim et al., "Intramolecular Interactions in Chemically Modified Escherichia coli Thioredoxin Monitored by Hydrogen/Deuterium Exchange and Electrospray Ionization Mass Spectrometry", Biochemistry, 40:14413-21, 2001		
	A56	Kim et al., "Site-Specific Amide Hydrogen/Deuterium Exchange in E. coli Thioredoxins Measured by Electrospray Ionization Mass Spectrometry", J Am Chem Soc, 123:9860-6, 2001		
	A57	Kim et al., "Conformational changes in chemically modified Escherichia coli thioredoxin monitored by H/D exchange and electrospray ionization mass spectrometry", Protein Sci, 11:1320-9, 2002		
	A58	Krishnan et al., "Purification of an acid protease and a serine carboxypeptidase from Aspergillus niger using metal-chelate affinity chromatography", J. Chromatography, 329:165-170, 1985		
	A59	Kwong et al., "Probability Analysis of Variational Crystallization and Its Application to gp120, The Exterior Envelope Glycoprotein of Type 1 Human Immunodeficiency Virus (HIV-1)", J. Biol. Chem., 274:4115-4123, 1999		
	A60	Lamzin et al., "Current state of automated crystallographic data analysis", Nature Structural Biology, November 7, 2000, Supplement:978-981, 2000		
	A61	Lattman, E., "Use of the Rotation and Translation Functions", Meth. Enzymol., 11:55-77, 1985		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number	10/577,179
			Filing Date	11/1/2004
			First Named Inventor	Virgil L. Woods
			Art Unit	1631
			Examiner Name	Unknown
(use as many sheets as necessary)			Attorney Docket Number	SDUC1160-1 (041673-3603)
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	A62	Law et al., "Cooperativity in Forced Unfolding of Tandem Spectrin Repeats", Biophys. J., 84:533-44, 2003		
	A63	Lee et al., "Estimation of Changes in Side Chain Configurational Entropy in Binding and Folding: General Methods and Application to Helix Formation", Proteins, 20:68-84, 1994		
	A64	Lesley, et al., "Structural genomics of the Thermotoga maritima proteome implemented in a high-throughput structure determination pipeline", Proc. Natl. Acad. Sci. U.S.A., 99:11664-11669, 2002		
	A65	Loh et al., "Hydrogen Exchange in Unligated and Ligated Staphylococcal Nuclease", Biochemistry, 32:11022-11028, 1993		
	A66	Louie et al., "Allosteric energy at the hemoglobin beta chain C terminus studied by hydrogen exchange", J. Mol. Biol., 201:755-764, 1988		
	A67	Louie et al., "Salt, phosphate and the Bohr effect at the hemoglobin beta chain C terminus studied by hydrogen exchange", J. Mol. Biol., 201:765-772, 1988		
	A68	Mallikarachi et al., "Effects of ATP and CTP on the Conformation of the Regulatory Subunit of Escherichia coli Aspartate Transcarbamylase in Solution: A Medium-Resolution Hydrogen Exchange Study", Biochemistry, 28:5386-5391, 1989		

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	A69	Mandell et al., "Solvent Accessibility of the Thrombin-thrombomodulin Interface", J. Mol. Biol., 306:575-589, 2001	
	A70	Mandell, et al., "Measurement of Amide Hydrogen Exchange by MALDO-TOF Mass Spectrometry", Anal. Chem., 70:39487-3995, 1998	
	A71	Mandell, et al., "Identification of protein-protein interfaces by decreased amide proton solvent accessibility", Proc. Natl Acad Sci USA, 95:14705-10, 1998	
	A72	Mathews, et al., "Functional Analysis of a Substrate and Cofactor Complex Structures of a Thymidylate Synthase-Complementing Protein", Structure, 11:677-690, 2003	
	A73	Mayne et al., "Effect of Antibody Binding on Protein Motions Studied by Hydrogen-Exchange Labeling and Two-Dimensional NMR", Biochemistry, 31:10678-10685, 1992	
	A74	McCloskey, "Introduction of Deuterium by Exchange for Measurement by Mass Spectrometry", Meth. Enzymol., 193:329-338, 1990	
	A75	Milne et al., "Determinants of protein hydrogen exchange studied in equine cytochrome c", Protein Sci., 7:739-745, 1998	

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	A76	Molday et al., "Primary Structure Effects on Peptide Group Hydrogen Exchange", Biochemistry, 11:150, 1972	
	A77	Murphy et al., "Thermodynamics of Structural Stability and Cooperative Folding Behavior in Proteins", Adv Protein Chem, 43:313-61, 1992	
	A78	Murphy et al., "Molecular basis of co-operativity in protein folding", J Mol Biol, 227:293-306, 1992	
	A79	Noel and Tsai, "Phospholipase A ₂ Engineering: Design, Synthesis, and Expression of a Gene for Bovine (Pro)Phospholipase A ₂ ", J. Cell. Biochem., 40:309-320, 1989	
	A80	Paci et al., "Unfolding proteins by external forces and temperature: The importance of topology and energetics", Proc. Natl. Acad. Sci. U.S.A., 97:6521-6526, 2000	
	A81	Paterson et al., "An Antibody Binding Site on Cytochrome c Defined by Hydrogen Exchange and Two-Dimensional NMR", Science, 249:755-759, 1990	
	A82	Peterson et al., "Mass-spectrometric analysis of agonist-induced retinoic acid receptor γ conformational change", Biochem J, 362:173-81, 2002	

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	A83	Radford et al., "Hydrogen Exchange in Native and Denatured States of Hen Egg-White Lysozyme", Proteins, 14:237-248, 1992	
	A84	Ranson et al., "ATP-Bound States of GroEL Captured by Cryo-Electron Microscopy", Cell, 107:869-879, 2001	
	A85	Ray et al., "Allosteric Sensitivity in Hemoglobin at the α -Subunit N-Terminus Studied by Hydrogen Exchange", Biochemistry, 25:3000-3007, 1986	
	A86	Resing, et al., "Modeling Deuterium Exchange Behavior of ERK2 Using Pepsin Mapping to Probe Secondary Structure", J. Am Soc Mass Spectrum, 10:685-702, 1999	
	A87	Rief et al., "Single Molecule Force Spectroscopy of Spectrin Repeats: Low Unfolding Forces in Helix Bundles", J. Mol. Biol., 286:553-61, 1999	
	A88	Rogero et al., "Individual Breathing Reactions Measured by Functional Labeling and Hydrogen Exchange Methods", Meth. Enzymol., 131:508-517, 1986	
	A89	Romero et al., "Thousands of Proteins Likely to Have Long Disordered Regions", Pac. Symp. Biocomput., 3:437-448, 1998	

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	A90	Rosa et al., "An experimental procedure for increasing the structural resolution of chemical hydrogen-exchange measurements on proteins: Application to ribonuclease S peptide", J. Mol. Biol., 133:399-416, 1979	
	A91	Rosa et al., "Hydrogen exchange from identified regions of the S-protein component of ribonuclease as a function of temperature, pH, and the binding of S-peptide", J. Mol. Biol., 145:835-851, 1981	
	A92	Rosa et al., "Effects of binding of S-peptide and 2'-cytidine monophosphate on hydrogen exchange from the S-protein component of ribonuclease S", J. Mol. Biol., 160:517-530, 1982	
	A93	Rousseeuw and Yohai, "Robust Regression by means of S-Estimators", Robust and Nonlinear Time Series Analysis, ed. W.H. Franke and D. Martin, New York: Springer-Verlag, p. 256-72, 1984	
	A94	Sakata and White, "An Alternative Definition of Finite Sample Breakdown Point With Applications to Regression Model Estimators", Journal of the American Statistical Association 90, 1099-1106, 1995	
	A95	Sakata and White, "High Breakdown Point Conditional Dispersion Estimation with Application to S&P 500 Daily Returns Volatility", Econometrica 66, 529-67, 1998	
	A96	Smith, et al., "Probing the Non-covalent Structure of Proteins by Amide Hydrogen Exchange and Mass Spectrometry", J. Mass Spectrometry, 32:135-146, 1997	

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	A97	Spraggon et al., "Computational analysis of crystallization trials", Acta. Cryst. D., 58:1915-1923, 2002	
	A98	Stevens et al., "Industrializing Structural Biology", Science, 293:519-520, 2001	
	A99	Stevens et al., "Global Efforts in Structural Genomics", Science, 294:89-92, 2001	
	A100	Studier et al., "Use of T7 RNA Polymerase to Direct Expression of Cloned Genes", Methods Enzymology, 185:60-89, 1990	
	A101	Takahashi et al., "Cathepsin D from Procine and Bovine Spleen", Meth. Enzymol., 80:565-581, 1981	
	A102	Thevenon-Emeric et al., "Determination of Amide Hydrogen Exchange Rates in peptides by Mass Spectrometry", Anal. Chem., 64:2456-2358, 1992	
	A103	White, H., "Maximum Likelihood Estimation of Misspecified Models", Econometrica 50, 1-25, 1982	

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	A104	Winger et al., "Probing Qualitative Conformation Differences of Multiply Protonated Gas-Phase Proteins via H/D Isotopic Exchange with D ₂ O", J. Am. Chem. Soc., 114:5897-5989, 1992		
	A105	Woods Jr. et al., "High Resolution, High-Throughput Amide Deuterium Exchange-Mass Spectrometry (DXMS) Determination of Protein Binding Site Structure and Dynamics: Utility in Pharmaceutical Design", Journal of Cellular Biochemistry, 37:89-98, 2001		
	A106	Wrabl et al., "Thermodynamic propensities of amino acids in the native state ensemble: Implications for fold recognition", Protein Sci., 10:1032-45, 2001		
	A107	Wrabl J.O., et al., "Thermodynamic environments in proteins: Fundamental determinants of fold specificity", Protein Sci, 11(8):p. 1945-57, 2002		
	A108	Wright et al., "Intrinsically Unstructured Proteins: Re-assessing the Protein Structure-Function Paradigm", Journal of Molecular Biology, 293:321-331, 1999		
	A109	Xiaoming et al., "A Novel Carboxylesterase from Aspergillus niger and Its Hydrolysis of Succinimide Esters", Carlsberg Res. Commun., 54:241-249, 1999		
	A110	Xie, et al., "Thermodynamic characterization of an equilibrium folding intermediate of staphylococcal nuclease", Protein Sci., 3:2175-84, 1994		

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Substitute for form 1449/PTO			Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number	10/577,179
			Filing Date	11/1/2004
			First Named Inventor	Virgil L. Woods
			Art Unit	1631
			Examiner Name	Unknown
(use as many sheets as necessary)			Attorney Docket Number	SDUC1160-1 (041673-3603)
Sheet	16	of	16	

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	*6
	A111	Yan et al., "Hydrogen/deuterium exchange and mass spectrometric analysis of a protein containing multiple disulfide bonds: Solution structure of recombinant macrophage colony stimulating factor-beta (rhM-CSF β)", Protein Sci., 11:2113-24, 2002	
	A112	Yan et al., "Crystal Structure of the Repetitive Segments of Spectrin", Science, 262:2027-2030, 1993	
	A113	Zawadzki et al., "Dissecting interdomain communication within cAPK regulatory subunit type II β using enhanced amide hydrogen/deuterium exchange mass spectrometry (DXMS)", Protein Sci., 12:1980-1990, 2003	
	A114	Zhang et al., "Structural comparison of recombinant human macrophage colony stimulating factor β and a partially reduced derivative using hydrogen deuterium exchange and electrospray ionization mass spectrometry", Protein Sci., 10:2336-45, 2001	
	A115	Zhang et al., "Determination of amide hydrogen exchange by mass spectrometry: A new tool for protein structure elucidation", Protein Sci., 2:522-531, 1993	
	A116	Zhang et al., "Human recombinant [C22A] FK506-binding protein amide hydrogen exchange rates from mass spectrometry match and extend those from NMR", Protein Sci., 6:2203-17, 1997	
	A117	Zhu et al., "Purification and Characterization of an Extracellular Acid Proteinase from the Ectomycorrhizal Fungus Hebeloma crustuliniforme", App. Envir. Microbiol., 56:837-843, 1990	

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